

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-22 (Canceled).

Claim 23 (New): A device for automated optimization of a service life of technical facilities and/or risk determination of technical facilities, comprising:

a capture module for capturing facility data; and

an analysis module for analyzing the facility data and/or optimizing the service life of the facility, wherein the capture module comprises at least one measuring device and/or sensor, connected to the optimization device decentralized via a network, with corresponding interfaces for determining one or more facility-specific quality factors, wherein the measuring device and/or sensor is allocated to a particular technical facility,

a first database with predefined risk elements, wherein a risk instance and/or a risk potential of the technical facility can be detected in a quantified manner by a risk element;

a second database with predefined protection elements, wherein a protection device and/or a protection possibility of technical facilities can be detected in a quantified manner by a protection element;

at least one risk element and/or at least one protection element stored allocated to the technical facility, wherein a facility-specific weighting factor can be determined for each risk element and protection element, which weighting factor comprises the relative weighting ratio of the risk elements and/or protection elements with respect to one another;

wherein by the at least one measuring device and/or sensor, a facility-specific quality factor can be determined for each risk element and protection element, wherein the quality factor comprises an instantaneous facility-specific instance of a technical risk element or protection element on the basis of the measured facility data; and

an evaluation module for determining risk analysis values and/or facility optimization values on the basis of the sum of the products of the risk elements with associated weighting factors and quality factors combined with the sum of the products of the protection elements with associated weighting factors and quality factors.

Claim 24 (New): The device as claimed in claim 23, further comprising:

a memory module comprising a multiplicity of facility risk types, wherein the facility risk types in each case comprise at least one risk element and/or one protection factor and each technical facility can be allocated to one facility risk type; and

a normalization module for automatically generating a facility-risk-type-specific reference value, wherein the facility data of different technical facilities are normalized on the basis of the reference value of the associated facility risk type by the normalization module.

Claim 25 (New): The device as claimed in claim 23, further comprising an extrapolation module for automatically generating the risk analysis values and/or optimization data for possible combinations and weightings of the protection elements and/or risk elements.

Claim 26 (New): The device as claimed in claim 23, wherein a group risk factor can be allocated to each facility risk type, wherein the group risk factor can be calculated by the evaluation module and comprises the overall risk of all technical facilities of a facility risk type.

Claim 27 (New): The device as claimed in claim 23, wherein the capture module is configured to be accessible decentralized via a network.

Claim 28 (New): A method for automated risk management and/or automated optimization of a service life of technical facilities, wherein facility data are captured by a capture module of an optimization device and facility risks are optimized by an evaluation module of the optimization device on the basis of the facility data, the method comprising:

generating and storing a list with risk elements in a first database of the optimization device, wherein a risk instance and/or a risk potential of technical facilities can be detected in a quantified manner by a risk element;

generating and storing a list with protection elements in a second database of the optimization device, wherein a protection device and/or a protection possibility of technical facilities can be detected in a quantified manner by a protection element;

storing at least one risk element and/or protection element allocated to the technical facility, wherein a facility-specific weighting factor is determined for each associated risk element and protection element, which weighting factor comprises the relative weighting ratio of the risk elements and/or protection elements with respect to one another;

determining a facility-specific quality factor by the capture module for each risk element and protection element via corresponding interfaces by a respective measuring and/or capture device, wherein the quality factor comprises the facility-specific instance of a risk element or protection element on the basis of the measured facility data; and

determining, by the evaluation module, on the basis of the sum of the products of the risk elements with associated weighting factors and quality factors combined with the sum of the products of the protection elements with associated weighting factors and quality factors, at least one risk analysis value for automated risk management and/or facility optimization value for automated optimization of at least one protection device or minimization of a risk potential of the technical facility.

Claim 29 (New): The method as claimed in claim 28, further comprising:

generating and storing at least two facility risk types in a memory module of the optimization device, wherein the facility risk types comprise in each case at least one risk element and/or one protection element and each technical facility can be allocated to one facility risk type; and

generating a reference value for each facility risk type, wherein the facility data of different technical facilities are normalized by a normalization module on the basis of the reference value of the associated facility risk type.

Claim 30 (New): The method as claimed in claim 29, wherein the facility risk types and/or the associated reference values are generated dynamically.

Claim 31 (New): The method as claimed in claim 29, wherein the facility risk types are generated such that a technical facility can always be allocated unambiguously in each case to one facility risk type.

Claim 32 (New): The method as claimed in claim 28, further comprising:

generating and storing a two-dimensional matrix table in accordance with a combination, in which a first dimension is allocated to the protection level of a technical facility and a second dimension is allocated to the risk level of a technical facility;

transferring, for automated risk management and/or for automated optimization of the service life of the technical facility, the sum of the products of the protection elements with associated weighting factors and quality factors of the technical facility in the first dimension,

and transferring the sum of the products of the risk elements with associated weighting factors and quality factors of the technical facility in the second dimension; and

determining that the at least one risk analysis value and/or facility optimization value on the basis of location of entry in the matrix table.

Claim 33 (New): The method as claimed in claim 32, wherein the matrix table is divided into predefinable sectors, wherein a sector corresponds to at least one definable risk analysis value and/or facility optimization value.

Claim 34 (New): The method as claimed in claim 32, wherein the matrix table is normalized by a facility-risk-specific normalization factor for determining the risk analysis values and/or facility optimization values for a technical facility.

Claim 35 (New): The method as claimed in claim 34, wherein the facility-risk-specific normalization factor is generated dynamically on the basis of available facility data of technical facilities of the corresponding facility risk type.

Claim 36 (New): The method as claimed in claim 32, wherein a scale of the first and/or second dimension of the matrix table can be linearly selected.

Claim 37 (New): The method as claimed in claim 32, wherein a scale of the first and/or second dimension of the matrix table can be nonlinearly selected.

Claim 38 (New): The method as claimed in claim 28, wherein the risk analysis values and/or facility optimization values for possible combinations and weightings of the protection

elements and/or risk elements are generated automatically and stored accessible to a user by an extrapolation module.

Claim 39 (New): The method as claimed in claim 28, wherein a group risk factor is allocated to each facility risk type by the evaluation module, wherein the group risk factor comprises the overall risk of all technical facilities of a facility risk type.

Claim 40 (New): The method as claimed in claim 28, wherein the group risk factor is generated dynamically by the evaluation module.

Claim 41 (New): The method as claimed in claim 28, wherein the capture module is configured accessible decentralized via a network.

Claim 42 (New): The method as claimed in claim 28, wherein groups of protection elements are formed as knock-out protection elements with one or more protection elements by the evaluation module, wherein a knock-out protection element determines and/or dominates behavior of the entire group if a given limit value of the knock-out protection element is reached.

Claim 43 (New): A computer-aided portfolio management system, comprising:
a first database with predefined risk elements, wherein a risk instance and/or a risk potential of the technical facility can be detected in a quantified manner by a risk element;
a second database with predefined protection elements, wherein a protection device and/or a protection possibility of technical facilities can be detected in a quantified manner by a protection element;

wherein at least one risk element and/or at least one protection element is stored allocated to the technical facility, wherein a facility-specific weighting factor can be determined for each risk element and protection element, which weighting factor comprises the relative weighting ratio of the risk element and/or protection element with respect to one another;

at least one measuring and/or capture device with corresponding interfaces for determining a facility-specific quality factor for each risk element and protection element, wherein the quality factor comprises an instantaneous facility-specific instance of a technical risk element or protection element on the basis of the measured facility data;

an evaluation module for determining risk analysis values on the basis of the sum of the products of the risk elements with associated weighting factors and quality factors combined with the sum of the products of the protection elements with associated weighting factors and quality factors,

wherein the portfolio management system enables or blocks a purchase and/or sale of securities and/or bonds on the basis of the risk analysis values.

Claim 44 (New): The computer-aided system as claimed in claim 43, further comprising:

a memory module that comprises a multiplicity of facility risk types, wherein the facility risk types in each case comprise at least one risk element and/or one protection factor and each technical facility can be allocated to one facility risk type; and

a normalization module for automatically generating a facility-risk-type-specific reference value, wherein the facility data of different technical facilities are normalized by the normalization module on the basis of the reference value of the associated facility risk type; and

wherein purchase and/or sale of securities can be determined by the portfolio management system such that loss risks are minimized with highest possible profit possibilities.